

Abstract

FLEXIBLE INTERLOCKING WALL SYSTEM

A masonry wall system is disclosed incorporating a plurality of courses of
5 masonry blocks, each block has vertical and horizontal interlocking structures with
mating surfaces (11,15,16,17). The main block, has a stabilizing slot. Metal
reinforcement tendons are inserted into these stabilizing holes (14) at
predetermined intervals and connected to the wall at the top and bottom. Corner
10 blocks (26) are employed to connect the walls at right angles and are used in
alternating configurations to staggered the vertical joints from course to course.
This is also done with the main blocks. The predetermined tolerances between the
masonry components and the reenforcing tendons permit the wall to have a fluid
property. Forces such as settling, hydrostatic pressure and seismic disturbances are
15 then automatically absorbed and systematically distributed across the entire wall.
When all of the masonry components reach the end of their tolerance, the wall
locks up as a solid interconnected mass. The force is then passed on to the
stabilizing tendons which now act to stabilize the wall against further movement.
The movement of the wall can be adjusted after assembly of this wall by applying
increased tension to the tendons.